

Exoskeleton Advisory Committee

June 27, 2018 online meeting minutes

In attendance:

Rick Goggins, Ergonomist, DOSH, Washington State Labor & Industries

Matt Marino, Physical Therapist, Ergonomist, Briotix

Ornwipa (Fah) Thamsuwan, Postdoctoral Fellow, Ergonomics Lab Manager, University of Saskatchewan

Absent:

Pete Johnson, Professor, Env. and Occ. Health Sciences, University of Washington

Rich Gardner, Lead Ergonomist, Boeing

Jim Lin, Ergonomist, SHARP, Washington State Labor & Industries

Stephen Bao, Senior Epidemiologist, SHARP, Washington State Labor & Industries

June Spector, Associate Professor, Env. and Occ. Health Sciences, University of Washington

Keith Osborne, Ergonomist, Seattle City Light

Sarah Martin, Occupational Therapy Supervisor, Insurance Services, Washington State Labor & Industries

Catherine Trask, Associate Professor, Canadian Centre for Health and Safety in Agriculture, University of Saskatchewan

Delia Treaster, Ergonomist, Ohio Bureau of Workers Compensation

Chris Reid, Human Factors and Ergonomics Engineer, Boeing

Agenda

- Review latest drafts of documents
- Brainstorm document sharing site possibilities (e.g., Google Drive, Sharepoint)
- Talk about next steps – when and how to share the committee's products publicly

Discussion

Position Statement:

- After one small correction, this document appears to be a final draft.
- The position statement should be shared with the rest of the committee for one last review.
- Perhaps Chris Reid can share the document with the ASTM committee to get their input.
- The committee will need to discuss and decide how to share the statement and other documents publicly once completed.

List of Exoskeletons

- Considered limiting the list to only those devices that are currently available in the U.S. Decided to keep all of the exoskeletons currently in the document, but list those available in the U.S. first. Awareness of exoskeletons available overseas could be helpful for organizations with international operations.
- Information on exoskeleton specifications hard to come by. Manufacturers don't want to share details too freely due to competition. This includes whether or not the individual devices are adjustable or come in sizes to fit the population.
- Academic research has begun with the goal of directly comparing different devices. Shoulder devices are currently being tested, and back device testing is also in the works.
- The Washington State Department of Labor & Industries has opened up a SHIP grant application cycle: <http://www.lni.wa.gov/safety/GrantsPartnerships/SHIP/>. The grants can be used for developing innovative return to work programs. This could be a good opportunity to propose a project to answer some of the research questions that the committee has identified.
- A previous SHIP grant project included some limited testing of an exoskeleton with loggers. The exoskeleton may not have been appropriate for logging, and the measurements taken did not include energy expenditure. Perhaps this information can be shared with the committee and with the ASTM group.

Process and Research Questions

- It was decided to hold off on reviewing these documents until more committee members could be involved.
- The concept of including functional outcome measures in the process was proposed. It may make sense to have periodic objective measures related to RTW outcomes in order to help decide whether to continue exoskeleton deployment or not.

Collaboration website options:

- ASTM has a collaboration area. All committee members would need to join ASTM in order to use this option. The cost to join is \$75.
- Google Drive is a free option and is compatible with Microsoft Office formats. Some organizations, including Washington State L&I, may not allow access to Drive from work computers.
- Briotix uses Box. Matt will check to see if they have a collaboration space.

Next steps:

Action item	Who?
Review final draft of position statement and vote on whether or not to share it with ASTM	All
Look into Box as an option for collaboration	Matt
Look into Google Drive for collaboration	Need a volunteer
Look into alternatives to Skype for the next online meeting	Need a volunteer